

## GUARDIAN INDUSTRIES – FABRICATION

### RESTRUCTURING THE VALUE CHAIN FOR NORTH AMERICA COMMERCIAL MARKETS

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Guardian Industries is one of the world's largest manufacturers of float and coated glass for commercial, residential and automotive applications. The float and coat glass products are sold to fabricators, who fabricate insulating glass units (IGUs) and sell IGUs downstream to glaziers. The glaziers frame the IGUs and install them on buildings. Guardian's focus for the project was to eliminate waste in the downstream segment of North American commercial value chain. The objectives of the project were to determine the most efficient value chain, recommend how far downstream Guardian should participate, and identify the recommended execution path in order to maximize value while also minimizing downside risk.

To evaluate this opportunity, the Tauber team met with key stakeholders at every segment of the value chain to understand the business model and to determine their key value drivers when making procurement decisions. Once the team understood the value chain, it used a business case framework to size and segment the market, document the key value drivers, and determine the total cost of ownership for both current and optimal state scenarios. After the team determined that Guardian could leverage their economies of scale as a float glass manufacturer and recent process innovations to serve a segment of the market at a lower total cost than their competition, it developed a set of execution scenarios.

The key drivers of the execution decision centered on the downstream opportunity relative to channel conflict and incremental capital. After a holistic evaluation of each scenario, the team recommended a contract manufacturing approach for a market segment where the customers value high quality and lowest total cost while continuing its position as a float glass manufacturer in segments where customers value short lead times. Additionally, the team developed a set of risks and mitigation steps to be considered throughout the execution phase.

After implementing the contract manufacturing strategy, Guardian's North America commercial business net present value (NPV) would be expected to increase by \$349MM. In addition, the value stream evaluation model built by the team will be used by Guardian for other market segments and geographies across the globe.